

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 September 2004 (16.09.2004)

PCT

(10) International Publication Number
WO 2004/078652 A1

(51) International Patent Classification⁷: C01G 25/00,
25/02

(21) International Application Number:
PCT/KR2003/002619

(22) International Filing Date: 1 December 2003 (01.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10-2003-0014245 7 March 2003 (07.03.2003) KR

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(81) Designated States (national): CN, JP, US.

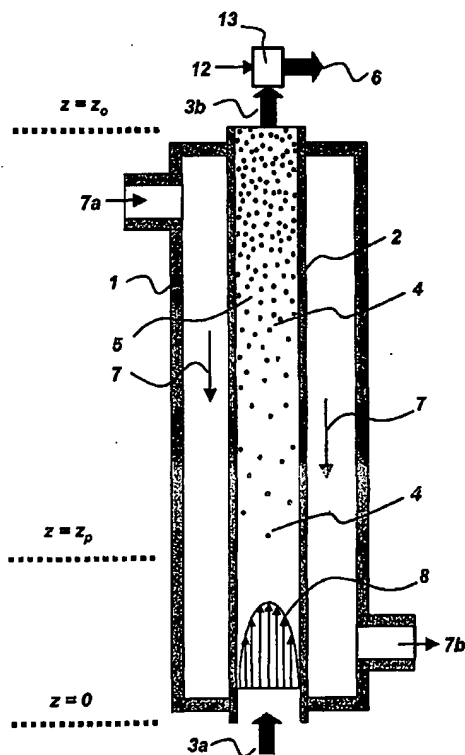
(84) Designated States (regional): European patent (AT, BE,
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR CONTINUOUS PREPARATION OF NANOMETER-SIZED HYDROUS ZIRCONIA SOL



(57) Abstract: The present invention relates to a method a method for continuous preparation of a well dispersed spherical hydrous zir-
conia particles with an average diameter (d_p) of 1~1,000 nm in the form
of sol solution, which method comprises continuously supplying the
aqueous solution of a zirconium salt at a concentration of 0.001~0.5
mole/l to a reactor consisting of one or more than two reaction tubes
at a temperature of less than 25°C, heating the said aqueous solution
in the reactor(s) in a continuous flow state up to the boiling point, and
then discharging the said solution through the outlet of the said reac-
tor(s). Contrary to the method employing a conventional batch-type
reactor or semi-continuous stirred-type reactor, the method for con-
tinuous preparation of a hydrous zirconia sol according to the present
invention can allow various operational parameters to be controlled in
a certain range and thus contributes to remarkably improve the qual-
ity of a hydrous zirconia sol to be prepared or of the zirconia powder
obtainable as a final product.